Synchro-Sunlight photography

THE KALART COMPANY
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We have all admired the photographic technique employed by Hollywood photographers in rendering those fine photographic effects. Of course, they have elaborate and expensive equipment - truckloads of it - at their disposal, complete with power lines to furnish the current necessary to operate huge spot lights, flood lights, and other auxiliary lines.

Several more adventuresome professionals have invested heavily in this sort of equipment and are achieving some remarkable results which we all envy. We have seen this work reproduced in some of the high class publications and have marvelled at it.

Inspired by these strikingly beautiful pictures, the Kalart Company has evolved a new technique based upon the use of synchronized photoflash in conjunction with daylight. This is Synchro-Sunlight Photography.

Some examples of this new technique are enclosed herewith. These illustrations were made with a Kalart Speed Flash and the exposure data accompanying them explain in detail how each of these was made. Careful study and a little thought given to this new technique will enable you also to make such pictures with your own camera fitted with a Kalart Speed Flash.

The chief distinguishing feature of the Synchro-Sunlight picture is the use of sunlight for strong back and top lighting while the Speed Flash preserves full detail in the dark foreground and front of the subject. Cloud detail in all its glory is preserved by the use of a suitable filter. Another feature is the absence of distracting detail in the background and the manner in which distant objects are silhouetted against a perfectly rendered sky.

The prints herewith are from the original negatives, straight prints entirely free from dodging, retouching, or other manipulations.

This picture was made with a Zeiss Super Ikonta A camera fitted with a Kalart Speed Flash. The exposure was 1/50th second at f 8 on Panatomic film without a filter and a standard photoflash lamp was fired in synchronism with the shutter.

Exposure data: 1/200th second f 9 without a filter. One lamp fired from the camera about fifteen feet from the subject.
A secondary lamp fired about eight feet from the boy on the swing.
The Kalart Senior Photoflash Synchronizer was used for making this picture.

Exposure data: 1/50th second at f 9 with a K 2 filter over the lens. A standard photoflash lamp on a fifteen foot extension cord was fired about eight feet from the right of the tree.

The Kalart Speed Flash fired the lamp in synchronism with the shutter.

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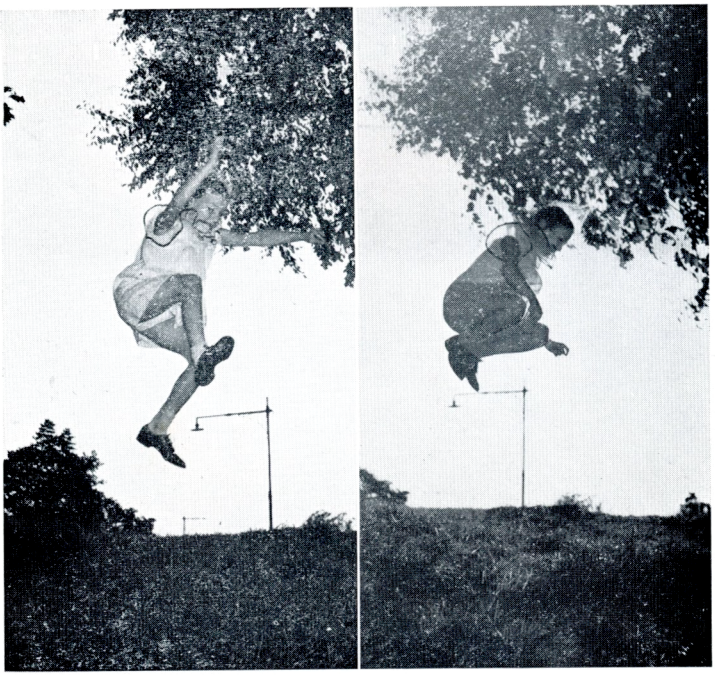

Courtesy Zeiss Magazine

These comparative pictures show the effect obtained through the use of Synchro-Sunlight. The exposure for each of these pictures was 1/250th second at f 8 without a filter.

The right hand picture was taken without a flash bulb, the left hand picture with a small size flash bulb. Eastman Panatomic film was used for both pictures.

Exposure data: 1/250th of a second at f 8 with a standard size photoflash bulb and without a filter.

The amateur and professional alike can now create for himself a wide range of new lighting effects by simply taking the Kalart Speed Flash outdoors into the sunlight. At first glance it might seem that similar photographs can be obtained with an open flash, in which the shutter is opened, the photoflash set off, and the shutter then closed by separate manual operations. However, the sky and background are likely to be over exposed during the relatively long period the shutter remains open and the background of the subject will be greatly over exposed.

When making SPEED FLASH pictures in daylight adjust the shutter speed for the distant portion of the picture in which the detail is to be preserved. The use of a light meter will help in determining this shutter speed. The flash light should be judged by the distance of the flash bulb from the subject to be illuminated. An exposure scale for that purpose is printed in this folder. The use of a filter such as the K 2 or ordinary sky filter is recommended and the filter factor should be reckoned with in determining the exposure time.

The position of the sun may be disregarded although it should not be directly in the lens when in full brilliance. Distant hills, landscapes, clouds, seascapes and other interesting backgrounds which would otherwise be over-exposed in making a straight snapshot will be reproduced in full clarity. The foreground, under ordinary conditions would of course be under-exposed; but this is relieved by the flash. By arranging the reflector in different positions in relation to the subject in the foreground, a variety of lighting effects is available. In combination with daylight, or even direct sunlight, this will yield very unusual and strikingly beautiful compositions. A relatively small lens opening will be necessary to assure depth of focus, which is an important consideration, as the background must now be sharply defined, and the foreground being in many instances the subject matter of the picture.

The exposure scale reproduced herewith should be referred to in adjusting the lens stop in accordance with the distance of the flash bulb from the subject. The use of filters must be compensated for by adjusting the lens stop or distance of lamp to subject, NOT BY INCREASING THE SHUTTER EXPOSURE.

Here is a simple rule to remember concerning the relation of one lens opening to the next on the shutter. Square both figures: f 4.5 and f 6.3, for example. F 6.3 squared is 39.69 - or almost twice the total of f 4.5 squared which is 20.25. Therefore, f 6.3 is almost half the aperture of f 4.5.

Speed Flash Exposure Scale

WITH ONE FLASH BULB

FOR EXPOSURES ON VERICHROME TYPE FILM

DISTANCE LAMP TO SUBJECT	LENS STOP TO USE	
	Standard No. 20 (25c. list) 1/100 or 1/200 Sec.	Baby Size No. 10 (15c. list) 1/100 Sec.
6 *feet*	*f* 16	*f* 11
10 *feet*	*f* 11	*f* 8
15 *feet*	*f* 8	*f* 6.3
20 *feet*	*f* 6.3	*f* 4.5
25 *feet*	*f* 4.5	*f* 3.5

One Stop Smaller May Be Used for Exposures on S. S. Pan or Similar Extra Fast Film

Other applications of Synchro-Sunlight Photography immediately suggest themselves. Those winter mornings when everything is covered with a fresh new fall of snow - beautiful picture material, but more than likely a dull sky and diffused characterless light rob the snow of shadows and visual texture. What pictures are possible with a strong, well-directed light source such as a synchronized flash to throw long shadows exactly where wanted. Dull and hazy days at the beach will present the same problem and the Kalart Speed Flash can be your solution. Then, there are those hard to render long scale forest scenes with brilliant sun splashes across the sombre floor of the thick woods. With the Kalart Speed Flash to light up the darker areas and close portions of the subject you can get plenty of woodsy detail and avoid chalky contrast in the sunlit patches. Countless other uses of this new technique will be found by the ambitious worker.

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